the oxidizing gas and the organic metal source gases of lead and titanium diluted with the diluent gas are supplied to the substrate by dissolving at least one of an organic metal source of lead and titanium in an organic solvent and by evaporating the organic solvent.

9 12. (Amended) The method of claim 1, further comprising forming a crystal nucleus of perovskite structure formed by an oxide comprising lead and titanium on the substrate prior to forming the ferroelectric film.

REMARKS

By this Amendment, Applicants have amended claims 1-5 and 12. No new matter has been added. Accordingly, claims 1-6, 8, 9, 12, and 13 are pending in the application.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: April 29, 2002

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APPENDIX TO THE AMENDMENT

IN THE CLAIMS:

Please amend claims 1-5 and 12, as follows:

1. (Twice amended) A method of forming a thin film on a substrate in a reactor comprising a side having a shower head with a plurality of nozzles and a separate discharge nozzle, the method comprising:

[forming a crystal nucleus of perovskite structure on the substrate, the crystal nucleus of perovskite structure comprising an oxide formed of lead and titanium;]

positioning the substrate in the reactor;

heating the substrate to a predetermined temperature;

supplying the reactor with organic metal source gases comprising lead, zirconium, and titanium via the plurality of nozzles, wherein the organic metal source gases are diluted with a diluent gas;

supplying the reactor with an [oxide] oxidizing gas via the separate discharge nozzle; and

forming a ferroelectric film on the substrate, the ferroelectric film comprising a perovskite crystal structure formed by an oxide comprising lead, zirconium, and titanium,

wherein a total pressure in the reactor is at least about 0.1 Torr.

2. (Twice amended) The method of claim 1, wherein

the [oxide] oxidizing gas and the organic metal source gases of lead and titanium are supplied to the substrate at a pressure ranging from about 0.001 Torr to about 0.01 Torr.

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3. (Twice amended) The method of claim 1, wherein

the [oxide] oxidizing gas and the organic metal source gases of lead and titanium diluted with the diluent gas are supplied to the substrate at a pressure ranging from about 0.001 Torr to about 0.01 Torr.

4. (Twice amended) The method of claim 1, wherein

the [oxide] oxidizing gas and the organic metal source gases of lead and titanium diluted with the diluent gas are supplied to the substrate at a pressure of at least about 0.1 Torr.

5. (Twice amended) The method of claim 1, wherein

the [oxide] oxidizing gas and the organic metal source gases of lead and titanium diluted with the diluent gas are supplied to the substrate by dissolving at least one of an organic metal source of lead and titanium in an organic solvent and by evaporating the organic solvent.

12. (Amended) The method of claim 1, [wherein the] further comprising forming a crystal nucleus of perovskite structure [is] formed by an oxide comprising lead and titanium on the substrate prior to forming the ferroelectric film.

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